Title (en)
  NON-LINEAR SPRINGS AND MATTRESSES INCLUDING THE SAME

Title (de)
  NICHTLINEARE FEDERN UND MATRATZEN DAMIT

Title (fr)
  RESSORTS NON LINÉAIRES ET MATELAS LES COMPRENANT

Publication
  EP 3302179 A4 20190123 (EN)

Application
  EP 15894464 A 20150605

Priority
  US 2015034346 W 20150605

Abstract (en)
  [origin: WO2016195700A1] A pocketed spring, such as that used in a mattress, comprises: a compression spring having an upper end convolution and a lower end convolution opposite the upper end convolution, and a plurality of helical intermediate convolutions between the upper end convolution and the lower end convolution; a flexible enclosure including a top wall positioned adjacent to the upper end convolution of the compression spring, a bottom wall positioned adjacent to the lower end convolution of the compression spring, and a side wall that extends from the top wall to the bottom wall; and a tension member connected to the flexible enclosure. The tension member acts in opposition to the compression spring until the pocketed spring is compressed to a point at winch the tension member no longer applies any force. Thus, the pocketed spring exhibits a non-linear response when compressed.

IPC 8 full level
  A47C 27/06 (2006.01)

CPC (source: EP IL KR US)
  A47C 23/0435 (2013.01 - IL KR); **A47C 27/062** (2013.01 - IL US); **A47C 27/064** (2013.01 - EP IL KR US)

Citation (search report)
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Designated contracting state (EPC)
  AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
  WO 2016195700 A1 20161208; AU 2015396842 A1 20171214; AU 2015396842 B2 20181108; BR 112017026206 A2 20180904;
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  CN 108243604 A 20180703; CN 108243604 B 20210205; DK 3302179 T3 20211115; EP 3302179 A1 20180411; EP 3302179 A4 20190123;
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